

FACCE-JPI Pre-Event on International Soil Research, January 27, 2016

## Soil research in the Joint Programming Initiative on Agriculture, Food Security and Climate Change

### FACCE-JPI

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FACCE-JPI Scientific Advisory Board



Agriculture Food Security and Climate Change



## Context

### 5 core research themes

1. Sustainable food security under climate change.
2. Environmentally sustainable intensification of agricultural systems.
3. Developing synergies and reducing trade-offs between food supply, biodiversity and ecosystem services.
4. Adaptation to climate change.
5. Mitigation of climate change.



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## Running FACCE projects involving soil

**ERA-NET Plus on Climate Smart Agriculture**

- CAOS: Climate-Smart Agriculture on Organic Soils
- CINDERELLA: Comparative analysis, INtegration and EXemplary imPlEmentation of cLimate smart LAnd use practices on organic soils: Progressing paludicultures after centuries of peatland destruction and neglect

**International Call on GHG Mitigation**

- Many of the projects are relevant to soils, and details are available from the FACCE secretariat.



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## Running FACCE projects involving soil

**Joint call with Belmont Forum: Food Security and Land Use Change**

- AFGROLAND: African Food, Agriculture, Land and Natural Resource Dynamics, in the context of global agro-food-energy system changes

**Joint call with BiodivERsa**

- There are 6 projects related to soil under this theme.



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## Upcoming joint actions involving soil

**1. ERA-GAS: ERA-NET for monitoring & mitigation of Greenhouse gases from agri- and silvi-culture**

- Will launch a call for transnational research proposals under the ERA-NET Cofund scheme of Horizon 2020 of the European Commission on 1 March 2016.
- The scientific scope addresses collaborative projects in the following research areas:
  - 1) Improving national GHG inventories and monitoring, reporting and verification of emissions
  - 2) Refining and facilitating the implementation of GHG mitigation technologies
  - 3) State of the art production systems that are profitable and improve food and for biomass production while reducing GHG emissions
  - 4) Assessment of policy and economic measures to support emissions reductions across the farm-to-fork and forest-to consumer chain.
- The indicative total budget amounts to 14,5 M €
- Closing date for pre-proposals is planned to be 15 May 2016.

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## Upcoming joint actions involving soil



**2. WaterWorks 2015 ERA-NET cofund**

- Collaboration of Water JPI and FACCE JPI
- On sustainable water use in agriculture to increase water use efficiency and reduce soil and water pollution.
- The call is expected to open on February 16, 2016 with a closing date for pre-proposals on April 19, 2016.
- Funders from 23 countries have allocated initial national call contributions of in total approximately 18 M€ from National funds. The 7.9 M€ EU top up will generate a call budget of over 26 M€.

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## Upcoming joint actions involving soil

### 3. Thematic Annual Programming (TAP) Network on Agricultural Soil Functionality

- New FACCE instrument to define (part of) national research programmes together. Mutually agreed text will be included in national programmes
- participating on a voluntary basis.
- After national funding decisions, project meetings are organized among projects working on a given topic to discuss objectives, methods and expected outcomes (project clusters).
- Scope: Agricultural Soil Functionality with a focus on carbon sequestration
- Integrated approaches to sustainable soil management (soil carbon and soil quality), including aspects of ecosystem services made available by soils, biodiversity in relation to soils and food security
- Preparatory meeting yesterday

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## FACCE objectives on soil research

Examine the international landscape on soil research for food security and climate change adaptation and mitigation to explore opportunities for synergy and cooperation between FACCE-JPI activities and other relevant EU and international research initiatives

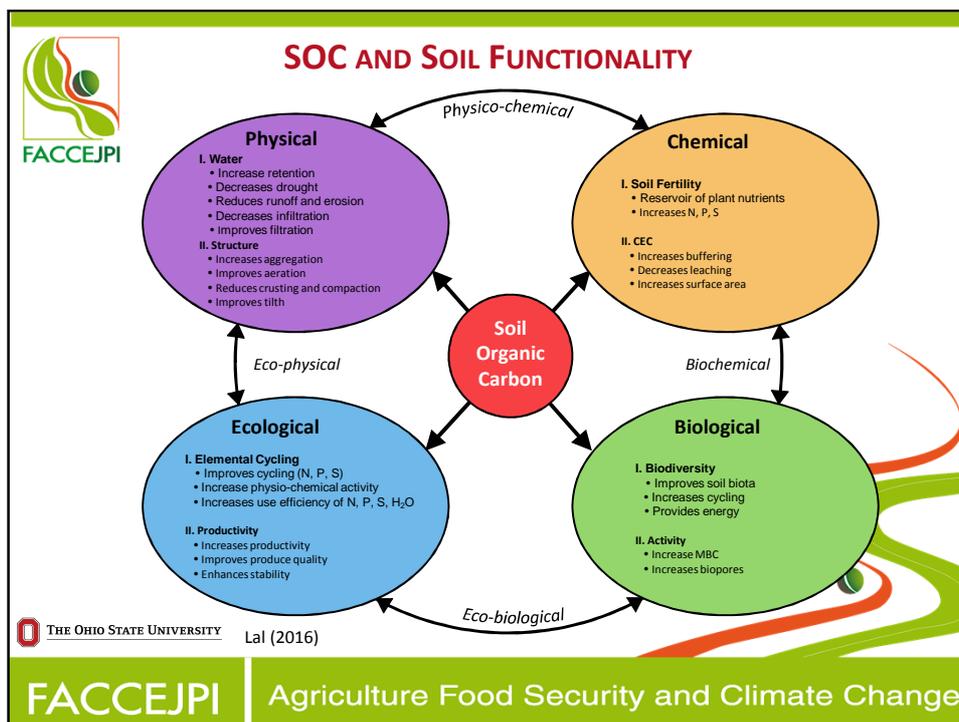
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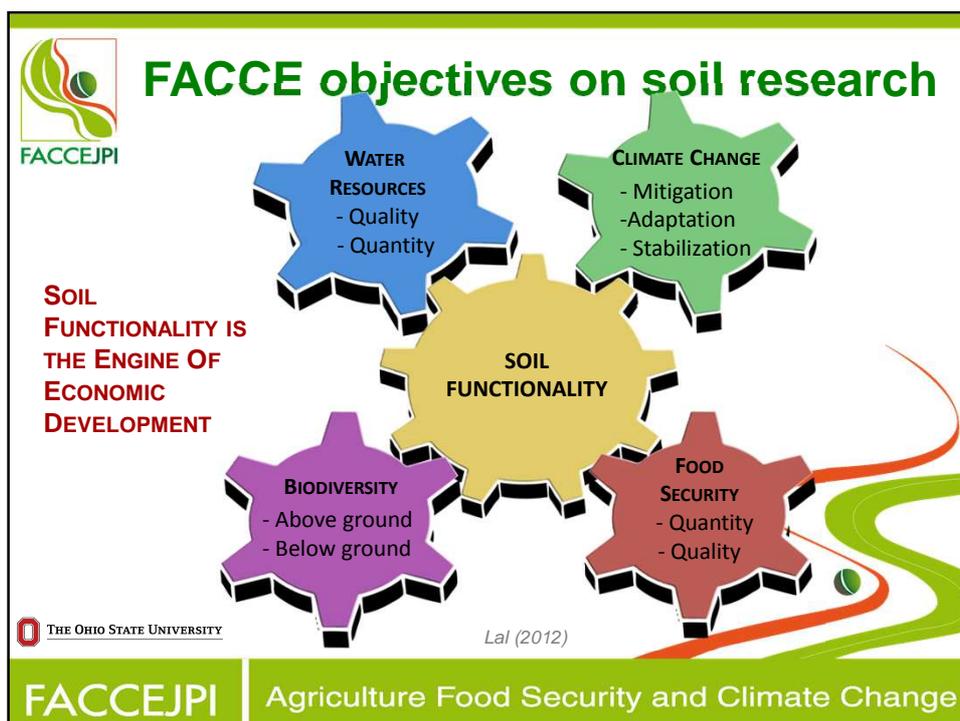
## SOIL FUNCTIONALITY

“It is the capacity of a specific soil to function under designed circumstances to meet its planned intentions or requirement without any loss of original functional capability”.

This concept addresses the performance aspect of a specific soil according to the design or specific goals.

-----Yong et al.(2012)





**FACCE objectives on soil research**

**THE LAW OF RETURN**

"It states that the nutrients harvested from soil must be returned. Harvesting without returning is a robbery of the soil and a banditry; a particularly mean form of banditry, because it involves robbing of future generations which are not here to defend themselves"

*Sir Albert Howard*

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**Thank you for your attention!**

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